REMARKS

In response to the Final Office Action mailed July 27, 2006, reconsideration is respectfully requested in view of the above amendments and the following remarks. By the above amendment, claims 74-75 have been canceled and claims 76-80 have been amended. It is urged that support for the above amendments may be found throughout the specification as originally filed, for example at page 18, lines 1-4. No new matter has been added. The above amendments are not to be construed as acquiescence to the Examiner's stated grounds for rejection and are made without prejudice to prosecution of any subject matter removed or modified by this amendment in a related divisional, continuation or continuation-in-part application.

Applicants wish to thank Examiner Zeman for the productive telephone interview of October 26, 2006, and provide herein amendments as discussed during the interview.

In the Final Office Action mailed July 27, 2006, claims 74-81 remain rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. In particular, the Examiner asserts that the specification fails to provide basis for the genus of polypeptides comprising amino acids 1-27 of SEQ ID NO: 392 or sequences having 90% identity to SEQ ID NO: 392.

Applicants respectfully traverse this rejection. As set forth in the above amendment, claims drawn to polypeptides comprising amino acid residues 1-27 of SEQ ID NO: 392 have been canceled at this time, without prejudice to further prosecution by Applicants. As for claims drawn to polypeptides sharing 90% identity with SEQ ID NO: 392, Applicants have amended claims 76 and 77, for purposes of clarity, such that the claimed polypeptides comprise SEQ ID NO: 392, "or a variant thereof having at least 90% identity to SEQ ID NO: 392, wherein said variant reacts with an antibody that specifically binds the polypeptide of SEQ ID NO: 392." Applicants respectfully submit that this subject matter was well supported, and in Applicants' possession, at the time the application was filed.

As noted previously, and as discussed with Examiner Zeman in the telephone interview of October 26, 2006, biological function/activity is but one example of an identifying characteristic sufficient to support a claimed genus of polypeptides. Under the Examination Guidelines set forth by the Patent and Trademark Office, the written description requirement for a claimed genus may be satisfied by the description of a representative number of species or the

disclosure of relevant, identifying characteristics, sufficient to show the applicant was in possession of the claimed genus. Guidelines for Examination of Patent Applications under the 35 U.S.C. § 112, ¶1, "Written Description" Requirement, 66 Fed. Reg. 1099, at 1106 (emphasis added). Examples of such identifying characteristics include complete or partial structure, other physical and/or chemical properties, functional characteristics when coupled with a known or disclosed correlation between function and structure, etc. (*e.g.*, at 1106). In addition, for biomolecules, illustrative identifying characteristics may include a sequence, structure binding affinity, *binding specificity*, molecular weight, etc. (*e.g.*, at 1110).

In the present case, a single identifying characteristic shared by members of the currently claimed genus of variants having at least 90% identity to the O8E sequence of SEQ ID NO: 392 is their cross-reactivity with antibodies that are specific for SEQ ID NO: 392. Further, the biological function of the O8E polypeptide of SEQ ID NO: 392, or the claimed variants, is not relevant to the immunogenicity of the polypeptide or to its ability to be used to generate antibodies specific for SEQ ID NO: 392. Indeed, polypeptides related to, but not identical with, SEQ ID NO: 392, can be used to generate antibodies that are cross-reactive with Applicants' species of SEQ ID NO: 392, and are thus useful in the detection and/or targeting of ovarian cancer cells according to Applicants' disclosure, irrespective of the biological function of the polypeptide of SEQ ID NO. 392. This would be well appreciated by the artisan of ordinary skill.

Further still, illustrative guidance regarding the claimed genus of polypeptides is provided by Applicants' experimental identification of numerous O8E epitopes (*e.g.*, in Example 3). Knowledge of these epitopes certainly offers guidance to a skilled artisan regarding how and where a claimed polypeptide might be altered to form a variant, while still retaining immunogenicity. Thus, the specification as filed provides a core structure and also provides guidance relevant to how that core structure might be modified to generate variants of the claimed genus that retain antibody-binding specificity. Accordingly, Applicants respectfully submit that the written description requirement for the claimed invention is sufficiently satisfied. Reconsideration is respectfully requested.

Claims 76 and 77 also stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly containing new matter. According to the Examiner, the specification does not provide polypeptides comprising amino acid residues 1-27 of SEQ ID NO: 392 and polypeptides which react with an antibody which specifically binds SEQ ID NO: 392.

Applicants respectfully traverse. As noted above, claims drawn to polypeptides comprising amino acid residues 1-27 of SEQ ID NO: 392 have been canceled at this time, without prejudice to further prosecution by Applicants. As for the claim phrase relating to antibody cross-reactivity, Applicants have amended claims 76 and 77, for purposes of clarity, such that the claimed polypeptides comprise SEQ ID NO: 392, "or a variant thereof having at least 90% identity to SEQ ID NO: 392, wherein said variant reacts with an antibody that specifically binds the polypeptide of SEQ ID NO: 392."

As discussed with Examiner Zeman, this claim language is well supported by the specification as originally filed, for example at page 18, lines 1-4. This passage of the specification reads as follows: "Such variants may generally be identified by modifying one of the above polypeptide sequences and evaluating the reactivity of the modified polypeptide with ovarian carcinoma protein-specific antibodies or antisera as described herein." Thus, the specification clearly describes that the invention includes variant polypeptides, including those having at least 90% identity to SEQ ID NO: 392, as claimed, and that such variants include those having reactivity with an ovarian carcinoma protein of the invention, *i.e.*, SEQ ID NO: 392, as claimed. Reconsideration of this rejection is respectfully requested.

The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090.

Applicants respectfully submit that all of the claims remaining in the application are now believed to be in condition for allowance. Favorable consideration and a Notice of Allowance are earnestly solicited.

Respectfully submitted,

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